

1. <u>Do not evade President Trump's "Two-for-One" Executive Order using the</u> "transfer payment" accounting gimmick.

Each time the USPTO has exercised its section 10 fee-setting authority, the USPTO has called its patent fee increase a "**transfer payment** from one group to another". *See* Final Rule, 82 FR 52780, at 52780 (Nov. 14, 2017); Final Rule, 78 FR 4212, 4213 (Jan. 18, 2013). This accounting gimmick was pioneered under the Obama Administration but has continued under the current Administration as recently as November 2017 (just 3 months prior to your confirmation as Director). By calling the increased fees a "transfer payment" from one group to another, the USPTO has brazenly claimed that the additional fees paid by patent applicants "does not affect the total resources available to society" and therefore "is not subject to the requirements of Executive Order 13771 (82 FR 9339, February 3, 2017)." 82 FR at 52780, 52813.

"Executive Order 13771"—which the USPTO has so far evaded—is President Trump's "Two-for-One" executive order! That executive order directs agencies to repeal two existing regulations for every new regulation.

The USPTO seems to believe that its fee-setting authority is exempt from President Trump's "Two-for One" executive order, but the USPTO has not explained why. The USPTO has not explained, for example, who is the second "group" of people receiving the increased fees paid by patent applicants? How is the total cost imposed on society zero, if inventors must pay *more money* out of their pockets to file and maintain a patent after the rule change than they did before the rule change? How is the total cost imposed on society (including the cost of lost innovation, lost jobs, and lost wages) equal to zero, if an inventor *decides not to file a patent application* because he cannot afford to pay the increased filing fees? None of these questions have been answered by the USPTO when the agency has invoked the "transfer payment" accounting gimmick to side-step President Trump's "Two-for One" executive order.

Under your leadership, Director Iancu, the agency should recognize and announce that increased fees paid by the patent community is not a "transfer payment" from one group of people to another group.

2. <u>Conduct a separate "elasticity analysis" for large-, small- and micro- entities when assessing the impact of regulatory burdens imposed by increased fees.</u>

Although the USPTO sets and adjusts fees for three different types of entities—large-, small-, and micro- entities—the USPTO expressly "assumes" that all three entity types are affected the *same* way by a fee increase. *See* Final Rule, 82 FR at 52801 (responding to US Inventor's comment that "that the [USPTO's] elasticity supplement does not address elasticity separately for large, small, and micro entities"



by responding that "[i]n this rule, the Office assumes that the fee rate adjustments are not substantial enough to create a significant and measurable change in demand for existing products and services regardless of entity size.") (emphasis added).

The USPTO has provided no justification for its "assumption" that all three entity types have the same ability and willingness to pay more fees. Obviously, a trillion-dollar company like Apple or Amazon can afford to pay the USPTO's increased fees more easily than, say, a micro-entity individual inventor (who by dentition under the AIA must have a gross income of less than three times the median U.S. household income). Empirically, as US Inventor has previously explained in its public comments, there is evidence that small inventors react to a hardship in the patent system much differently than large firms do. *See* Alberto Galasso & Mark Schankerman, Patent Rights, Innovation and Firm Exit, National Bureau of Economic Research, NBER Working Paper 21769 (Dec. 2015) (finding that loss of a patent causes firms to reduce innovation by about 50 percent—an effect the authors found was "driven entirely by small firms"—and also increases the probability of exit for small (but not large) firms").

But despite the obvious and unequal "elasticity" between small and large firms, the USPTO treats small businesses the same as large businesses in terms of the impact of regulatory burdens.

Under your leadership, Director Iancu, the agency should conduct a separate "elasticity analysis" for large-, small- and micro- entities when assessing the impact of regulatory burdens imposed by increased fees.

3. When calculating the cost of a fee increase, do not merely include the "direct costs" of the additional fees themselves, but also include the "indirect costs" of lost jobs, lost wages, and increased trade deficit.

As US Inventor has previously explained in its public comments, regulations that disincentivize the procurement and enforcement of patents have a negative impact on (1) wages, (2) jobs, and (3) trade deficit.

First, <u>wages</u> are strongly correlated with patents. The Federal Reserve Bank of Cleveland has calculated that patents are the *single largest factor* in predicting a community's relative income. *See* Federal Reserve Bank Of Cleveland, 2005 Annual Report, at 17. The Brookings Institute found that "[i]f the metro areas in the lowest quartile patented as much as those in the top quartile, they would boost their economic growth by . . . an extra \$4,300 per worker." Jonathan Rothwell et al., Patenting Prosperity: Invention and Economic Performance In the United States and Its Metropolitan Areas, Brookings Institute at 15 (Feb. 2013). The Commerce Department found that "workers in IP-intensive industries earned an



average weekly wage of \$1,312," which is "46 percent higher than the \$896 average weekly wages in non-IP-intensive industries in the private sector." U.S. DEP'T COMMERCE, INTELLECTUAL PROPERTY AND THE U.S. ECONOMY: 2016 UPDATE at ii.

Second, **jobs** are strongly correlated with patents. The Commerce Department found that "IP-intensive industries" (including patent-intensive industries) directly or indirectly supported 45.5 million jobs, about 30 percent of all employment in the See U.S. Dep't Commerce, Intellectual Property and the U.S. ECONOMY: 2016 UPDATE atii. The report finds that "[p] atent- and copyright-intensive industries have seen particularly fast wage growth in recent years, with the wage premium reaching 74 percent and 90 percent, respectively, in 2014." *Id.* Likewise, the U.S. International Trade Commission has correlated the impact of the strength of a country's IP laws on U.S. jobs. See U.S. INT'L TRADE COMM'N, CHINA: EFFECTS OF INTELLECTUAL PROPERTY INFRINGEMENT AND INDIGENOUS INNOVATION POLICIES ON THE U.S. ECONOMY, USITC Pub. No. 4226 (May 2011) at xx (calculating that "if IPR protection in China improved substantially, U.S. employment could increase by 2.1 million FTEs (full-time equivalent workers)"). Moreover, Stanford Professor Stephen Haber surveyed "an array of studies employing econometric methods in an attempt to discern causal relationships between patent strength and economic growth" and "concludes that the weight of the evidence supports the claim of a positive causal relationship between the strength of patent rights and innovation—and thus, economic growth." Stephen Haber, Patents and the Wealth of Nations, 23 Geo. MASON L. Rev. 811, 812 (2016).

Third, the U.S. **trade deficit** increases when fewer U.S. companies received payments from foreigners in exchange for a license to the U.S. intellectual property. Indeed, "charges for the use of intellectual property" is a category of international trade that gives the United States a trade surplus of over \$85 billion in IP royalties and license fees. U.S. Census Bureau, Bureau Of Economic Analysis, U.S. International Trade In Goods and Services (Oct. 5, 2016). But, that surplus diminishes—and the overall U.S. trade deficit of \$500 billion widens—when fewer U.S. companies apply for and maintain U.S. patents that otherwise would have been licensed to foreign companies paying royalties to use those patents.

When US Inventor filed comments urging the USPTO to include these costs as part of its calculation of the burden imposed by its fee increase, the USPTO declined to do so. *See* Final Rule, 82 FR at 52801 (acknowledging US Inventor's comment that "patent applications, patent issues, and maintenance fees would decrease, all of which would lead to lost jobs, lost wages, and an increased trade deficit", but refusing to include these costs in the USPTO's cost calculation).



Under your leadership, Director Iancu, the agency should include as part of the calculation of the costs of any rulemaking, the impact of the proposed rule on (1) wages, (2) jobs, and (3) trade deficit.

4. Return funds from examination fees and maintenance fees that were improperly redirected to the PTAB back to examination.

This transfer was illegal under the AIA. But worse, it is damaging to take funding from the side of the USPTO that creates a patent to protect a property right, which is already underfunded, and transfer those funds to the side of the USPTO that destroys the same patent. This damage works to lower patent quality. Once lowered, more petitions are made to institute IPR's, PGR's and CBM's which further drains funding from examination to the insolvent PTAB. This is vicious circle that works to destroy the reliability and value of U.S. patents.

5. <u>Any fee increase must state with specificity how that fee increase will improve the reliability of patents.</u>

Reliability of patents is rightly your top concern. Today, U.S. patents are junk assets. The odds of invalidation in the PTAB and under the errant concept of an abstract idea as legislated by the courts under Section 101 is incredibly high.

This failure in reliability of a U.S. patent reduces the value of all patents, but this devaluation of patents is most acute in funding of early stage companies that are dependent on the reliability of U.S. patents. Patents have turned into a game of big numbers as a result. As the number of patents in a portfolio go up, the odds of killing all the patents go down. Some will survive. But the odds of killing all of the patents in a small portfolio, like those held by independent inventors and early stage companies, are too high to attract investment.

Increasing fees to obtain and hold junk patent asset, as is the case now, will undoubtedly stop many independent inventors and small entities from filing for patent protection in the U.S. While there has been little reporting from the USPTO on trends of small entities paying maintenance fees, the effect of raising costs for a junk asset is no doubt showing itself in a drop of small entities maintenance fees. It appears that this drop is the likely reason for increasing the first maintenance fee by such an extraordinary margin.

Raising fees without improving the reliability of patents will only serve to push inventors overseas, where patent rights are much more secure.

* * *



predicting a community's relative income. (*See* Exhibit a page A6.) The Brookings Institute found that "[i]f the metro areas in the lowest quartile patented as much as those in the top quartile, they would boost their economic growth by . . . an extra

\$4,300 per worker." (*Id.*) The Commerce Department found that "workers in IP- intensive industries earned an average weekly wage of \$1,312," which is "46 percent higher than the \$896 average weekly wages in non-IP-intensive industries in the private sector." (*Id.*) Second, **jobs** are strongly correlated with patents. The Commerce Department found that "IP-intensive industries" (including patent- intensive industries) directly or indirectly supported 45.5 million jobs, about 30 percent of all employment in the United States. (*Id.* at A6-A7.) Third, the U.S. **trade deficit** increases when fewer U.S. companies received payments from foreigners in exchange for a license to the U.S. intellectual property. Indeed, "charges for the use of intellectual property" is a category of international trade that gives the United States a trade surplus of over \$85 billion in IP royalties and license fees. (*Id.* at A7-A8.) But this surplus diminishes, and the overall U.S. trade deficit of \$500 billion widens, when fewer U.S. companies apply for and maintain U.S. patents and other intellectual property rights, and when foreign companies are less willing to pay for a license because of a perception that U.S. patents can be avoided or invalidated. (*Id.* at A8.)

The Secretary should stop the PTO fee increase from going into effect.

#2 - PTO's Subject Matter Eligibility Guidelines.

The Secretary should repeal the PTO's *Subject Matter Eligibility Guidelines*,² which go far beyond what is legally required under the statute (35 U.S.C. § 101) and Supreme Court case law. The *Guidelines* purport to "interpret" the law regarding patent eligibility under 35 U.S.C. § 101, and therefore the *Guidelines* constitute a "rule" within the meaning of the Administrative Procedure Act, 5 U.S.C. § 551(4) (defining "rule" as any "agency statement" to "implement, interpret, or prescribe law or policy").

However, rather than simply \underline{apply} the law of patent eligibility, the PTO Guidelines go much farther and \underline{make} new law. The Guidelines are harmful to U.S. innovation and to small business and entrepreneurs in particular.

The "abstract idea" exception, described in the PTO's *Guidelines*, has thrown the meaning of patentable subject matter into chaos by failing to define what is or is not an abstract idea, and conflating analysis intended for §§ 102, 103 and 112 into § 101's analysis. Today, what is patentable is completely in the eyes of the beholder.

² USPTO Subject Matter Eligibility Guidelines (last modified Mar. 24, 2017). https://www.uspto.gov/patent/laws-and-regulations/examination-policy/subject-matter-eligibility

-3-



Under the abstract idea exception, some PTO examination groups reject patent applications at rates above 90%, while the Patent Trial and Appeal Board invalidates around 90% of challenged patents, and trial courts invalidate 54%. Many of these patents are invalidated in preliminary motions without defining the claim terms and without evidence or testimony. Investors cannot predict what patent will be invalidated and justifiably assume patents have virtually no value in investment valuations of early stage startups.

The PTO should apply the Supreme Court decisions regarding § 101 in a manner that is narrowly limited to the holdings of those cases, rather than expanding those cases beyond the relevant facts and beyond what § 101 itself requires.

#3 – PTO's 37 C.F.R. §§ 42.1-42.304 (Trial Practice Before the Patent Trial & Appeal Board).

The Secretary should repeal 37 C.F.R. §§ 42.1-42.304, which are the regulations that allow a patent to be challenged at the Patent Trial & Appeal Board ("PTAB").

The PTAB is an administrative tribunal within the PTO. The PTAB primarily reviews legitimately issued patents under three distinct procedures: Inter Partes Review, Post Grant Review, and Covered Business Method Review. PTAB procedures are highly destructive, rendering most patents valueless for funding at an early stage.

Under 35 U.S.C. § 282(a), a patent is a presumptively valid property right, yet the PTAB disregards this law by treating patents as a public right, not a private property right. The PTAB invalidates at least one patent claim in more than 95% of the patents reviewed. Invalidating just one claim can neuter the enforceability of the entire patent, thus destroying it. An inventor's cost in defending a patent against a PTAB trial starts at around \$300,000 and burns up to five years of the patent's life. Big corporations are "gang tackling" small inventors by filing multiple PTAB trials on the same patent, which often drives up the cost of defending a patent into the multiple millions of dollars. Multiple challenges are mounted against the same patent because courts give no "estoppel" effect that would otherwise prevent further duplicative challenges.

The PTAB must be eliminated. Merely amending the rules will not fix its systemic problems. PTAB invalidation rates will undoubtedly vary with every new PTO Director, Secretary of Commerce, and President. This will leave the patent system perpetually unstable and, as such, unable to drive economic growth and job creation because patents will never be able to attract investment at early stages.

#4 - USPTO's 37 C.F.R. § 1.56 (Duty to disclose information material to patentability).

The Secretary should repeal and replace 37 C.F.R. § 1.56 as proposed in the notice of proposed rulemaking PTO-P-2011-0030, 81 Fed. Reg. 74987 (Oct. 28,



2016). The current version of 37 C.F.R. § 1.56 is outdated and overbroad. The rule imposes a burden on inventors that is far more onerous—and requires far more documents to be submitted to the PTO—than is required under current binding case law, namely, *Therasense*, *Inc.* v. *Becton*, *Dickinson* & *Co.*, 649 F.3d 1276 (Fed. Cir. 2011) (en banc).

The PTO has dragged its feet in amending § 1.56 to bring the agency into compliance with the six-year old *Therasense* decision. The PTO initially proposed to amend this rule shortly after the decision, when the PTO issued a notice of proposed rulemaking in July 2011. *See* 76 FR 43631 (July 21, 2011). After receiving mostly supportive comments on the proposal from the public, the PTO did nothing. Five years later, in October 2016, the PTO issued a second notice of proposed rulemaking, which mostly mirrors the first proposal.

There is no reason why the PTO is taking so long to reduce the burdens on applicants by revising § 1.56. The Secretary should step in to ensure that the PTO promptly issues a final rule that repeals and replaces § 1.56.

3290 Ridge Road Highland, IN 46322 www.usinventor.org



that "workers in IP-intensive industries earned an average weekly wage of \$1,312," which is "46 percent higher than the \$896 average weekly wages in non-IP- intensive industries in the private sector." (Id.) Second, \underline{iobs} are strongly correlated with patents. The Commerce Department found that "IP-intensive industries" (including patent-intensive industries) directly or indirectly supported

45.5 million jobs, about 30 percent of all employment in the United States. (*Id.* at A6-A7.) Third, the U.S. **trade deficit** increases when fewer U.S. companies received payments from foreigners in exchange for a license to the U.S. intellectual property. Indeed, "charges for the use of intellectual property" is a category of international trade that gives the United States a trade surplus of over \$85 billion in IP royalties and license fees. (*Id.* at A7-A8.) But this surplus diminishes, and the overall U.S. trade deficit of \$500 billion widens, when fewer U.S. companies apply for and maintain U.S. patents and other intellectual property rights, and when foreign companies are less willing to pay for a license because of a perception that U.S. patents can be avoided or invalidated. (*Id.* at A8.) Therefore, the Secretary should require the PTO to separately analyze, for each proposed rule, the impact on (1) wages, (2) jobs, and (3) trade deficit.

Respectfully submitted,

U.S. INVENTOR



Federal Register Office to ensure that all E012866 significant rules can be located on the Federal Register "advanced search" public database using the E012866 search filter.

Second, OMB should require a separate "elasticity analysis" for small businesses when assessing the impact of regulatory burdens, given that small businesses are far more likely to stop innovating (or even continuing to exist) than large businesses when presented with the identical burden. As *US Inventor* has previously explained (see attached Exhibit at pages A4-A5), empirical evidence shows that loss of a patent causes (1) firms to reduce innovation by about 50 percent—an effect the authors found was "driven entirely by small firms"—and (2) increases the probability of exit for small (but not large) firms." *See* Alberto Galasso & Mark Schankerman, Patent Rights, Innovation and Firm Exit, National Bureau of Economic Research, NBER Working Paper 21769 (Dec. 2015). Despite this clear evidence of unequal elasticity between small and large firms, the USPTO treats small businesses the same as large businesses in terms of the impact of regulatory burdens. (See Exhibit at pages A4-A5.) OMB should require all agencies to conduct a separate "elasticity analysis" for small businesses when assessing the impact of proposed rules.

Third, OMB should require all agencies to calculate the cost of proposed regulations on the U.S. economy as a whole—including (1) lost wages, (2) lost jobs, and (3) increased trade deficit. As US Inventor has previously explained (see attached Exhibit at pages A5-A9), regulations that make it more difficult to obtain and enforce U.S. intellectual property rights have a negative impact on each of those three economic factors. First, wages are strongly correlated with patents. The Federal Reserve Bank of Cleveland has calculated that patents are the single largest factor in predicting a community's relative income. (See Exhibit a page A6.) The Brookings Institute found that "[i]f the metro areas in the lowest quartile patented as much as those in the top quartile, they would boost their economic growth by . . . an extra \$4,300 per worker." (Id.) The Commerce Department found that "workers in IP-intensive industries earned an average weekly wage of \$1,312," which is "46 percent higher than the \$896 average weekly wages in non-IP- intensive industries in the private sector." (Id.) Second, jobs are strongly correlated with patents. The Commerce Department found that "IP-intensive industries" (including patent-intensive industries) directly or indirectly supported

45.5 million jobs, about 30 percent of all employment in the United States. (*Id.* at A6-A7.) Third, the U.S. **trade deficit** increases when fewer U.S. companies received payments from foreigners in exchange for a license to the U.S. intellectual property. Indeed, "charges for the use of intellectual property" is a category of international trade that gives the United States a trade surplus of over \$85 billion in IP royalties and license fees. (*Id.* at A7-A8.) But, that surplus diminishes—and



TABLE OF CONTENTS

I.	PTO Admits The Proposed Rule Is "Significant" Under EO12866, But The Office Of The Federal Register Did Not "Earmark It As Such" 3
II.	PTO's Elasticity Analysis Fails To Consider Small And Independent Inventors, Who Are Less Able To Afford The PTO's Increased Fees 4
III.	PTO Ignores The Societal And Macroeconomic Costs Of Te Proposed Rule When Fewer U.S. Inventors Obtain Patent Protection
	A. Lost Wages 6
	B. Lost Jobs 6
	C. Increased Trade Deficit7
IV.	RCE Fee Increases Are Punitive and Bad Policy, Especially h Today's Uncertain <i>Alice/Mayo</i> Environment
V.	A New NPRM Should Be Issued For This Rule By The Nat Administration, Given That The Rule Is "Significant" Under EO12866 And Raises Important Policy-Making Considerations



Other Goods	,792	89,150	9,358
SERVICES	750,860	488,657	262,203
Maintenance and Repair	,036	8,996	5,040
Transport	,221	97,050	,829
Travel	4,523	112,873	l,650
Insurance	,142	47,772	0,630
Financial	2,461	25,162	7,299
Charges for the Use of Intellectual	4,664	39,495	5,169
Telecoms, Computer, and Information	,895	36,440	45
Other Business Services	4,648	99,354	5,294
Government Goods and Services	,270	21,515	,245
TOTAL (GOODS AND SERVICES)			500,362
http://www.bea.gov/newsreleases/intern	ational/trade	e/2016/pdf/tra	•

The U.S. trade advantage in IP licensing will suffer, however, if fewer U.S. companies apply for and maintain U.S. patents. Foregone patenting by American inventors who cannot afford the PTO's higher fees will mean that fewer U.S. patents will exist in the future to be licensed. At the same time, the trend seen today in foreign patent offices (see chart below) with ever-more patents being applied for and granted in foreign patent offices than in the United States, means that a growing number of valuable patents will be issued in foreign patent offices and owned by foreign companies. The net effect of these changes will likely be that Americans will need to buy more patent licenses from foreigners, while foreigners buy fewer patent licenses from Americans—thereby, decreasing the U.S. trade advantage in IP licensing and *increasing the overall U.S. trade deficit*.



lefts applicants in a sea of uncertainty in Section 101 patent-eligibility jurisprudence. The lower courts struggle to apply Alice/Mayo. And each month ${\bf c}$ 0 the Federal Circuit issues a new decision that finds some claims patent-eligible that previously would not have been eligible under the PTO's Section 101 Guidelines. In this way, RCEs are a lifeline which allows an applicant to wait out the storm a bit longer in the hopes that calmer waters will arrive, allowing the applicant to overturn an examiner's final rejection in light of a new, more favorable court decision. RCEs should be encouraged for this purpose. Even the PTO acknowledges the current turbulence when it issues new examination memos each time the Federal Circuit renders significant new decisions involving Section 101. See, e.g., ROBERT W. BAHR, MEMO ON RECENT SUBJECT MATTER ELIGIBILITY

DECISIONS (Nov. 2, 2016) (discussing new cases that "provide additional information about finding eligibility for software claims").

Rather than incentivize RCEs as a lifeline for applicants, however, the Proposed Rule would cut off that lifeline for applicants (mostly small business and independent inventors) who are unable or unwilling to pay the higher RCE fees. While large businesses may be willing to pay more money to wait out the storm, small businesses and independent inventors will be lost at sea—abandoning their patent applications after a final rejection rather than filing a costly first, second, or third RCE.

The PTO should undertake a new policy analysis regarding RCE fees in light of the current Alice/Mayo uncertainty. The PTO should exercise its Section 10 fee-setting authority to incentivize rather than deter the filing of RCEs so that applicants can await greater certainty from the courts or Congress regarding Section 101 subject- matter eligibility.

V A New NPRM Should Be Issued For This Rule By The Nat Administration, Given That The Rule Is "Significant" Under EO12866 And Raises Important Policy-Making Considerations

President-elect Trump's website pledges to "Issue a temporary moratorium on new agency regulations that are not compelled by Congress or public safety." The Proposed Rule meets that definition.

Similarly, President-elect Trump's website pledges to "Ask all Department heads to submit a list of every wasteful and unnecessary regulation which kills jobs, and

³ https://www.donaldjtrump.com/policies/regulations (last visited Dec. 2, 2016).

which does not improve public safety, and eliminate them." ⁴As explained throughout these comments, the Proposed Rule meets that definition as well.

In the Proposed Rule, the PTO estimates that the increased fees will result in *million* in additional fees paid by the patent community in the next five years. See 81 Fed. Reg. at 68174. Because the cost of the Proposed Rule exceeds \$100 million annually, the PTO admits that the "[t]his rulemaking has been determined to be significant for purposes of Executive Order 12866." 81 Fed. Read 68179. As such, the Proposed Rule requires that a detailed cost-benefit analysis be conducted by the agency and approved by the Office of Information and Regulatory Affairs ("OIRA").

The next Administration may have different views on how an EO12866 analysis should be conducted, especially in the way that regulations' private-sector and societal burdens are calculated. Similarly, the next Administration may wish to undertake its own policy-making analysis in connection with the fee-setting power available to it under Section 10 of the AIA. The PTO has interpreted Section 10 of the AIA as giving the PTO Director the discretion to set or adjust fees so as to "encourage or discourage any particular [patent or trademark] service" that the PTO provides. *See* Bernard J. Knight, Jr., Memo on USPTO Fee Setting (Feb. 10,

2012). In this regard, the next Administration may have different views on what services it wants to "encourage or discourage." Therefore, given the importance of this policy-making function, the next Administration may want to wait for a new Director to be confirmed before going forward with the Proposed Rule or any other Section 10 feesetting proposal.

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In conclusion, given the concerns raised throughout these comments, *US Inventor* respectfully submits that the costs of the Proposed Rule should be recalculated to specifically reflect the impact on small businesses and independent inventors and the U.S. economy as a whole, and that the PTO should publish a new Notice of Proposed Rulemaking for public comment.

Respectfully submitted,

US Inventor